NORLITE, LLC

628 SO. SARATOGA STREET
PO BOX 684
COHOES, NY 12047
PHONE: (518) 235-0401
FAX: (518) 235-0233

October 16, 2013

Ms. Nancy Baker
Deputy Regional Permit Administrator
New York State Department of Environmental Conservation
Region 4
1130 North Westcott Road
Schenectady, NY 12306-2014 RETURN RECEIPT REQUESTED VIA EMAIL

Mr. Kenneth Eng
Air Compliance Branch
United States Environmental Protection Agency
Region 2
290 Broadway
New York, NY 10007-1866 RETURN RECEIPT REQUESTED VIA EMAIL

Re: Norlite Corporation-MACT Excessive Exceedances Report
Kiln 1: 09/26/13 – 10/14/13
Kiln 2: 09/26/13 – 10/14/13

Dear Sir/Madam:

In accordance with 40 CFR 63.1206(c)(3)(vi), the Norlite, LLC (Norlite) is submitting an "Excessive Exceedance Report" for the timeframe of 09/26/13 thru 10/14/13. The attached document explains each of the "malfunctions" for Kilns One and Two.

The results of the investigation concluded a majority of the waste feed cutoffs were a result of the span limit associated with the stack gas flow monitor. The majority of the cutoffs were attributed to the quench water spray head for the MMV not functioning because of a plugged line preventing water flow. With the Quench water flow rate reduced or eliminated, soda ash concentrated on the Ducon which contributed to soda ash solids building up on the stack gas probe. Ultimately, after a day of troubleshooting the entire scrubber operation, the blockage in the water line was found and cleared to re-establish proper water flow to the MMV quench water spray head.

Norlite has been working help resolve stack gas span cutoffs in general for almost a year. Norlite has been working with the Department to install a new optical flow technology to monitor stack gas flow rate. A test unit has been installed on Kiln 1 and RATA tested to obtain additional information to be used in future calculations. Norlite is working to have the unit in Kiln 1 completely certified and approved for operation by the Fall of 2013. Before the unit can be certified and officially used at the kiln, Norlite and the Department must first work several operational parameters for the monitoring device. Norlite has presented data which was collected when the optical flow sensor had RATA testing done on it to start the discussion for these operational parameters. This data is being compared with RATA data collected at the same time on the current stack gas flow measuring technology. After final approval is given for the unit on Kiln 1, Norlite will install a unit on Kiln 2 with an expedited schedule for completion which will hopefully see the unit in certified operation by late Fall or early Winter of 2013.

DCL: 2413

Norlite has also been working with the Department to improve LGF delivery and handling at the kilns to address these types of cutoffs. The Department has conditionally approved Norlite's plan to remove the minimum LLGF Line Pressure requirement, allow a positive displacement pump to be used for fuel flow control, and allow the use of a recirculation line for use during times when off LGF. The Department has requested a six month study be conducted without a minimum LLGF Line Pressure requirement. The study has been underway since May 01, 2103 and will be completed on October 31, 2013. Norlite is continuing to search for a positive displacement pump which will allow variable speed control, have tight pump tolerance, and have suitable reliability for long term use. Norlite will have a pump in place sooner but no later than December of 2013. Norlite will submit a final report to the Department in December 2013 detailing the findings from the study without a minimum LLGF Line Pressure. Norlite is hopeful to have final approval from the Department early 2014 for the positive displacement pump which is installed and for the final removal of the LLGF Line Pressure requirement. To further help develop a suitable fuel delivery system at the kilns, Norlite has enlisted the help of SPEC Engineering which specializes in process engineering and development. With addition of SPEC Engineering and the combustion expertise from Arcadis, Norlite is very hopeful to have a fully functional fuel delivery system at the kilns which will help reach a steady state operation.

All of the malfunctions that occurred were consistent with our Startup, Shutdown and Malfunction Plan (SSMP). As approved by the NYSDEC on February 6, 2006, these reports are being sent electronically.

Should you have any questions regarding this letter, please contact me at (518) 235-0401 or email at: tom.vanvranken@tradebe.com.

Sincerely,

Thomas Van Vranken

Thomas Van Vranken
Environmental Manager

Attachments

ecc: Don Spencer, NYDEC – R4 w/attachments
James Lansing, NYSDEC – CO w/attachments
Joseph Hadersbeck, NYSDEC – R4w/attachments
Jim Quinn, NYSDEC – R4 w/attachments
Tita LaGrimas – Tradebe

NORLITE, LLC
MACT EXCEEDANCE REPORT - KILN 1
09/26/13 - 10/14/13

Start Date	Start Time	End Date	End Time	Downtime	#	Event	Cause	Parameter	Limit	Corrective Action
9/29/2013	18:54:26	9/29/2013	20:41:37	1:47:11	197	Malfunction	The Primary Air Fan Stopped Which Caused A Low Rear Chamber Pressure to Occur	Back Chamber Pressure, 1 Second Delay	Opl	The Primary Air Fan Was Replaced to Establish Proper Rear Chamber Pressures
9/29/2013	20:59:04	9/29/2013	21:17:37	0:18:33	198	Malfunction	Instantaneous Upper Instrument Setpoint Reached for Stack Gas Span	Stack Gas Flow Rate	Span	Adjusted Fuel Flow
9/29/2013	23:28:58	9/30/2013	0:46:36	1:17:37	199	Malfunction	Instantaneous Upper Instrument Setpoint Reached for Stack Gas Span	Stack Gas Flow Rate	Span	Adjusted Fuel Flow
10/2/2013	16:24:39	10/2/2013	16:25:02	0:00:23	200	Malfunction	Instantaneous Upper Instrument Setpoint Reached for Scrubber Recirc. Rate Span Due to Plugged Filter Baskets Caused Erratic Flow Rates	Scrubber Recirc. Rate	Span	The WWTP Mechanic Cleaned the Filter Baskets to Establish Proper Flow Rates
10/3/2013	0:34:35	10/3/2013	0:40:16	0:05:41	201	Malfunction	Instantaneous Upper Instrument Setpoint Reached for Baghouse Inlet Temp. Span Due to the Temperature Probe Failing and Causing a Fault	Baghouse Inlet Temp.	Span	I&E Replaced the Failed Temperature Probe
10/3/2013	22:04:56	10/3/2013	22:05:22	0:00:26	202	Malfunction	Instantaneous Upper Instrument Setpoint Reached for Stack Gas Span Due to Water Droplets From the Mist Pad Hitting the Probe	Stack Gas Flow Rate	Span	The ID Fan Speed Was Reduced to Help Reduce Water Droplet Movement
10/4/2013	0:30:13	10/4/2013	0:30:40	0:00:27	203	Malfunction	Instantaneous Upper Instrument Setpoint Reached for Stack Gas Span Due to Water Droplets From the Mist Pad Hitting the Probe	Stack Gas Flow Rate	Span	The ID Fan Speed Was Reduced to Help Reduce Water Droplet Movement
10/4/2013	1:32:52	10/4/2013	1:53:29	0:20:37	204	Malfunction	Instantaneous Upper Instrument Setpoint Reached for Stack Gas Span Due to Water Droplets From the Mist Pad Hitting the Probe	Stack Gas Flow Rate	Span	I&E Cleaned the Probe and Inspect It for Damage
10/4/2013	2:02:20	10/4/2013	2:03:29	0:01:09	205	Malfunction	After Troubleshooting the Scrubber System, It was Determined the MMV Quench Nozzle Was Not Functioning Due to A Plugged Water Line Which Allowed Soda Ash on the Probe and Cause the Instantaneous Upper Instrument Setpoint Reached for Stack Gas Span	Stack Gas Flow Rate	Span	The Quench Line Was Cleared and The MMV Quench Flow Re-established to Prevent Soda Ash Buildup on the Probe
10/4/2013	10:40:09	10/4/2013	10:53:30	0:13:21	206	Malfunction	After Troubleshooting the Scrubber System, It was Determined the MMV Quench Nozzle Was Not Functioning Due to A Plugged Water Line Which Allowed Soda Ash on the Probe and Cause the Instantaneous Upper Instrument Setpoint Reached for Stack Gas Span	Stack Gas Flow Rate	Span	The Quench Line Was Cleared and The MMV Quench Flow Re-established to Prevent Soda Ash Buildup on the Probe
10/4/2013	11:07:40	10/4/2013	11:08:15	0:00:35	207	Malfunction	After Troubleshooting the Scrubber System, It was Determined the MMV Quench Nozzle Was Not Functioning Due to A Plugged Water Line Which Allowed Soda Ash on the Probe and Cause the Instantaneous Upper Instrument Setpoint Reached for Stack Gas Span	Stack Gas Flow Rate	Span	The Quench Line Was Cleared and The MMV Quench Flow Re-established to Prevent Soda Ash Buildup on the Probe

NORLITE, LLC

MACT EXCEEDANCE REPORT - KILN 1

09/26/13 - 10/14/13

Start Date	Start Time	End Date	End Time	Downtime	#	Event	Cause	Parameter	Limit	Corrective Action
10/4/2013	11:11:00	10/4/2013	11:11:28	0:00:28	208	Malfunction	After Troubleshooting the Scrubber System, It was Determined the MMV Quench Nozzle Was Not Functioning Due to A Plugged Water Line Which Allowed Soda Ash on the Probe and Cause the Instantaneous Upper Instrument Setpoint Reached for Stack Gas Span	Stack Gas Flow Rate	Span	The Quench Line Was Cleared and The MMV Quench Flow Re-established to Prevent Soda Ash Buildup on the Probe
10/4/2013	11:32:02	10/4/2013	11:32:54	0:00:52	209	Malfunction	After Troubleshooting the Scrubber System, It was Determined the MMV Quench Nozzle Was Not Functioning Due to A Plugged Water Line Which Allowed Soda Ash on the Probe and Cause the Instantaneous Upper Instrument Setpoint Reached for Stack Gas Span	Stack Gas Flow Rate	Span	The Quench Line Was Cleared and The MMV Quench Flow Re-established to Prevent Soda Ash Buildup on the Probe
10/4/2013	12:01:23	10/4/2013	12:02:04	0:00:41	210	Malfunction	After Troubleshooting the Scrubber System, It was Determined the MMV Quench Nozzle Was Not Functioning Due to A Plugged Water Line Which Allowed Soda Ash on the Probe and Cause the Instantaneous Upper Instrument Setpoint Reached for Stack Gas Span	Stack Gas Flow Rate	Span	The Quench Line Was Cleared and The MMV Quench Flow Re-established to Prevent Soda Ash Buildup on the Probe
10/4/2013	21:52:38	10/4/2013	21:52:57	0:00:19	211	Malfunction	After Troubleshooting the Scrubber System, It was Determined the MMV Quench Nozzle Was Not Functioning Due to A Plugged Water Line Which Allowed Soda Ash on the Probe and Cause the Instantaneous Upper Instrument Setpoint Reached for Stack Gas Span	Stack Gas Flow Rate	Span	The Quench Line Was Cleared and The MMV Quench Flow Re-established to Prevent Soda Ash Buildup on the Probe
10/4/2013	21:53:07	10/4/2013	22:10:55	0:17:48	212	Malfunction	After Troubleshooting the Scrubber System, It was Determined the MMV Quench Nozzle Was Not Functioning Due to A Plugged Water Line Which Allowed Soda Ash on the Probe and Cause the Instantaneous Upper Instrument Setpoint Reached for Stack Gas Span	Stack Gas Flow Rate	Span	The Quench Line Was Cleared and The MMV Quench Flow Re-established to Prevent Soda Ash Buildup on the Probe
10/13/2013	20:53:24	10/13/2013	21:21:04	0:27:40	213	Malfunction	Instantaneous Upper Instrument Setpoint Reached for Stack Gas Span Due to the Probe Being Dirty	Stack Gas Flow Rate		I&E Cleaned the Probe and Inspect It for Damage

NORLITE, LLC
MACT EXCEEDANCE REPORT - KILN 2
09/26/13 - 10/14/13

Start Date	Start Time	End Date	End Time	Downtime	#	Event	Cause	Parameter	Limit	Corrective Action
9/27/2013	10:01:08	9/27/2013	10:01:44	0:00:36	117	Malfunction	Controlling LGF Flow Rate With Valves Caused A Sudden Flow Increase Which Caused the Instantaneous Upper Instrument Setpoint to be Reached for LGF Flow Span	LGF Flow	Span	The LGF Valve Was Cleared and Proper Flow Rate Established
9/30/2013	18:37:37	9/30/2013	19:06:35	0:28:58	118	Malfunction	Controlling LGF Flow Rate With Valves Caused A Sudden Flow Increase Which Caused the Instantaneous Upper Instrument Setpoint to be Reached for LGF Flow Span	LGF Flow	Span	The LGF Valve Was Cleared and Proper Flow Rate Established
10/1/2013	5:17:40	10/1/2013	6:18:45	1:01:05	119	Malfunction	Controlling LGF Flow Rate With Valves Caused A Sudden Flow Increase Which Caused the Flame to Pulse and the CO's to Rise	Carbon Monoxide	Opl	Switched to Used Oil and Allowed the HRA to Clear
10/6/2013	20:52:50	10/6/2013	20:58:50	0:06:00	120	Malfunction	Nearing the End of the Burn Tank, the Pump Started Surging Which Caused Sudden Flow Rate Increases Which Caused the Instantaneous Upper Instrument Setpoint to be Reached for LGF Flow Span	LGF Flow	Span	The Trunnion Mechanic Switched Burn Tanks and Adjusted the Pump Pressure to Stop Future Pulsing
10/6/2013	20:59:06	10/6/2013	21:01:26	0:02:20	121	Malfunction	Nearing the End of the Burn Tank, the Pump Started Surging Which Caused Sudden Flow Rate Increases Which Caused the Instantaneous Upper Instrument Setpoint to be Reached for LGF Flow Span	LGF Flow	Span	The Trunnion Mechanic Switched Burn Tanks and Adjusted the Pump Pressure to Stop Future Pulsing
10/10/2013	23:36:37	10/10/2013	23:37:03	0:00:26	122	Malfunction	A Fuel Flow Surge Occurred Due to Controlling Flow Rate With Valves Which Caused A Pressure Pulse in the Kiln Which Affected the Rear Chamber Pressure	Back Chamber Pressure, 1 Second Delay	Opl	The Fresh Air Intake Valve Was Partially Closed to Create Additional Draft in the Rear Chamber
10/11/2013	15:18:33	10/11/2013	15:20:10	0:01:37	123	Malfunction	A Fuel Flow Surge Occurred Due to Controlling Flow Rate With Valves Which Caused A Pressure Pulse in the Kiln Which Affected the Rear Chamber Pressure	Back Chamber Pressure, 1 Second Delay	Opl	The Fresh Air Intake Valve Was Partially Closed to Create Additional Draft in the Rear Chamber
10/13/2013	11:37:10	10/13/2013	11:53:22	0:16:12	124	Malfunction	Nearing the End of the Burn Tank, the Pump Started Surging Which Caused Sudden Flow Rate Increases Which Caused the Instantaneous Upper Instrument Setpoint to be Reached for LGF Flow Span	LGF Flow	Span	The Kiln Operator Has Been Instructed to Use the Fuel Farm Tank Screen To Monitor When the Tank Will Be Finished
10/13/2013	11:53:48	10/13/2013	11:54:50	0:01:02	125	Malfunction	Nearing the End of the Burn Tank, the Pump Started Surging Which Caused Sudden Flow Rate Increases Which Caused the Instantaneous Upper Instrument Setpoint to be Reached for LGF Flow Span	LGF Flow	Span	The Kiln Operator Has Been Instructed to Use the Fuel Farm Tank Screen To Monitor When the Tank Will Be Finished
10/13/2013	11:55:02	10/13/2013	11:56:24	0:01:22	126	Malfunction	Nearing the End of the Burn Tank, the Pump Started Surging Which Caused Sudden Flow Rate Increases Which Caused the Instantaneous Upper Instrument Setpoint to be Reached for LGF Flow Span	LGF Flow	Span	The Kiln Operator Has Been Instructed to Use the Fuel Farm Tank Screen To Monitor When the Tank Will Be Finished